

ABSTRACT OF THE DISCLOSURE

An image processing apparatus for performing rendering processing of three-dimensional objects is provided. An object storage unit stores the three-dimensional data of the object and the array data of B-box which encloses the spatial region which the object occupies. A grouping unit reads in the B-box array from the object storage unit, does grouping of multiple B-boxes into groups based on the object characteristics and level of detail information. A rendering processing unit derives a brick in which there are B-boxes belonging to the same group and generates image data by doing rendering processing independently by brick to be stored in an image storage unit. A consolidation unit consolidates the image data per brick stored in the image storage unit and generates the final output image data to be displayed.